ABSTRACT

A highly reliable plated lead finishing structure for a semiconductor part using a Pd film or a Pd alloy film, instead of a traditional solder plating material, as a brazing metal, without causing a problem of short-circuits between terminals due to whiskers, is provided. In the plated lead finishing structure of the invention, when a plated film having a thickness of not larger than 0.3 μm is formed using Pd or a Pd alloy (26), instead of a conventional solder-plating material as a brazing metal, on the surfaces of the external connection terminals (10, 12) of a semiconductor part using copper or a copper alloy-based material, the film is plated without interposing any underlying layer or any intermediate metal layer between the material and the Pd- or Pd alloy-plated layer. In some cases, Au or an Au alloy (28) is further plated and has a thickness of not larger than 0.1 μm on the plated film.